

DOCUMENT RESUME

ED 108 343

80

EA 007 260

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TITLE Who's Afraid of Educational Accountability? (A Representative Review of the Literature).
INSTITUTION Colorado State Dept. of Education, Denver.
Cooperative Accountability Project.
SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.
PUB DATE 75
NOTE 66p.
AVAILABLE FROM CAP, Colorado Department of Education, 1362 Lincoln Street, Denver, Colorado 80203 (Single copy Colorado requestors only); SEAR, Wisconsin Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702 (All other requests)

EDRS PRICE MF-\$0.76 HC-\$3.32 PLUS POSTAGE
DESCRIPTORS *Bibliographies; Change Strategies; Cost Effectiveness; *Educational Accountability; Educational Assessment; Educational Objectives; Elementary Secondary Education; Evaluation; Feedback; *Literature Reviews; Management by Objectives; Models; Technical Assistance
IDENTIFIERS Elementary Secondary Education Act Title V; ESEA Title V

ABSTRACT

The work presented in this monograph is the author's own attempt to piece together a representative review of the literature on educational accountability; this attempt admittedly overlooks many works, does not always offer "the best" works (simply representative ones), and is patterned after the author's own observations of what is important and what is not--plainly a matter of individual judgment. The plan for this literature review is to offer (1) an overview of accountability, 1974; (2) a review of definitions and concepts; (3) a look at expressions of the accountability concept applied to public education; (4) an overview of accountability models; and (5) some continuing issues and concluding remarks. A list of references (not to be regarded as a definitive bibliography) is offered at the end. (Author/DW)

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CAP is a seven-state, 39-month project initiated in April, 1972, and financed by funds provided under the Elementary and Secondary Education Act of 1965 (Public Law 89-10, Title V, Section 505, as amended) with Colorado as the administering state.

The activity which is the subject of this report was supported in whole or in part by the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

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WHO'S AFRAID OF EDUCATIONAL ACCOUNTABILITY?

(A Representative Review of the Literature)

by

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COOPERATIVE ACCOUNTABILITY PROJECT
Denver, Colorado

1975

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EA 007 280

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FOREWORD

Most readers of the literature on educational accountability are immediately conscious of the varied ways in which the accountability concept has been and is being interpreted. While there may be some strength in the flexibility provided by a variety of interpretations, the lack of general consensus concerning the meaning of educational accountability has resulted in confusion and resistance within the educational ranks. A clear "translation" of accountability concepts now is essential to a proper understanding of the process and to its successful implementation. Lesley H. Browder, Jr. has provided such a translation in this highly useful monograph, *Who's Afraid of Educational Accountability? A Representative Review of the Literature*.

Although Dr. Browder notes that this is not a definitive analysis of all 4,000-plus items published to date in the area of educational accountability, he has accomplished a thorough exploration of many important documents both supportive and critical of the concept. Browder couples his summary of accountability definitions with a recap of the various outside pressures which have caused this educational phenomenon to gain momentum. While providing a parallel between performance by objectives in the noneducational world and the realm of education, he also interprets various applications of accountability which should aid the teacher, school administrator, parent, and others to gain a clearer understanding of the purpose of educational accountability as well as its many techniques.

This monograph should receive broad readership in light of the fact that all indications imply the American people are more interested than ever in the vitality of public education. Basically, the public (parents, taxpayers, and others) wants to see a relationship between the money they put into education...the expertise the educators add...and the outcome in terms of human learning results. Proponents of accountability believe this is a reasonable request.

As Dr. Browder's monograph reveals, there has been a serious search for better ways to evaluate educational performance. Findings based on extensive research are reported in the literature. It now remains for the public, government, and the education profession to join forces in demanding and seeking even better measures of performance and better reporting procedures. The continuing--even accelerating interest in educational accountability across the nation is a positive indication that a joint effort in accountability is rapidly becoming a reality.

Arthur R. Olson, Director
Cooperative Accountability Project

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CHAPTER I

INTRODUCTION: THE NATURE, RANGE AND SCOPE OF THE REVIEW

In the five-year period since 1969, the "accountability movement" (as some have labeled it) has generated over 4,000 books and articles, legislation and/or resolutions in 33 states, and has caused considerable concern in education's ranks (Hawthorne 1973; Kemp 1974). This report proposes to do two things: (1) to review what appears to the author as representative highlights of this educational accountability literature; and (2) to provide some perspective of where the movement is headed.

Naturally there are some obvious risks associated with such an effort. For one thing, the author has not read or even seen all 4,000-plus books and articles (although he probably is familiar with half the extant work). At the same time, and depending upon what genre of literature one lumps under the accountability banner, it is conceivable for the literature of the field to have expanded well beyond one-man mastery at this point.

This mushrooming of printed information stands in sharp contrast to 1970-71 when the author was completing his first effort (Browder 1971). At that time it was possible to contain nearly all the written materials of the accountability movement on the family dining room table, to be able to call by phone the leading contributors, to find out rapidly who was doing what, and to track down what a relatively small group thought was important.

Today this ability has evaporated. An information blizzard is in progress. The chance of oversight is excellent. Even James Kemp's (1974) excellent 157-page bibliography of the literature touches on only a portion of the existing works and omits many others (including this author's). If Kemp had decided to add, for example, "systems theory" and "management technology" as related portions of his accountability bibliography (perhaps in place of "functional literacy/illiteracy"), the bibliography would have had to be lengthened by many hundreds of pages. In short, a literature both so vast and changeable by inclusion or exclusion of areas believed or

not believed related to accountability is difficult to review. One is likely to miss some major works (particularly as their authors view them) and/or to disregard works that, in the judgment of others, clearly should have been acknowledged. The risk here is chastisement of the reviewer for not being "with it."

On the other hand, it might not be unfair to say that some 95 percent of the literature contributes very little new information, insights, perceptions, or conceptual development. "Hard data" research is even rarer. Citing Fred Niedermeyer and Stephen Klein's 1972 research as a "first," Stanley Elam (1974) complains (with the exception of small, subjective "I-know-a-case" investigations) that, until the Ernest House, Wendell Rivers, and Daniel Stufflebeam (1974) study of Michigan's statewide system of accountability, there has been a "research hiatus" on the subject. Thus, while there is a long "how-to-do-it" literature and even longer literature that might be labelled "the rhetoric of accountability," there also are gaps--notably in the areas of actual development of the concept and research evidence of its effectiveness. This observation is a way of saying that there has been more literary chest-beating about accountability than hard thinking, and more suggestions of what needs to be done and how than doing and finding out what difference it made.

The work presented in this monograph is the author's own attempt to piece together a representative review of the literature; this attempt admittedly overlooks many works, does not always offer "the best" works (simply representative ones), and is patterned after the author's own observations of what is important and what is not--plainly a matter of individual judgment. The plan for this literature review is to offer: (1) an overview of accountability, 1974; (2) a review of definitions and concepts; (3) a look at expressions of the accountability concept applied to public education; (4) an overview of accountability models; and (5) some continuing issues and concluding remarks. A list of references (not to be regarded as a definitive bibliography) is offered at the back of the monograph.

CHAPTER II

AN OVERVIEW OF ACCOUNTABILITY, 1974

What is striking about the state of accountability in 1974? From a literature nearly five years old, the following three impressions emerge:

1. *There are no commonly agreed-upon definitions.* The basic term itself, "accountability," has definitions ranging from the relatively loose idea of simply holding someone responsible for doing something to highly specified technical definitions. There is no lack of definitions. There is a lack of agreement on which ones to use. This leads to the problem of distinguishing when the term is being used appropriately and when it is not. In short, there is presently a sea of definitions (to be examined more closely below). This definitional surfeit need not be considered a serious problem in itself, but rather a signal that the term is ready for conceptual refinement.
2. *As a concept, accountability needs refinement.* It should be clear to anyone attempting to develop accountability conceptually that it is a term capable of being refined. It can depict a range of situations, degrees, and levels. Unlike the state of pregnancy (either you are or you are not), there are ranges of meaning between "general accountability" and "specific accountability," between "institutional accountability" and "technological accountability," between "managerial accountability" and "educational accountability," etc. The failure to produce a recognized, basic, multi-dimensional framework that sorts out, differentiates, and comprehensively unifies levels, degrees, and forms of accountability contributes to the confusion. Seemingly the initial roots of the idea have pushed it to another stage in its development.

It would appear that a stronger root system is necessary if the substance of the idea is to mature further. Leon Lessinger (1970a, 1970b, 1970c), the "father" and original popularizer of "educational accountability," introduced the notion of holding educators accountable for what students learn as a pragmatic practitioner who recognized the need to focus both public and professional attention on what our schools produce in terms of educational results. At the time, theoretical niceties were not Lessinger's interest.

If a comprehensive framework cannot be developed or agreed upon as a common point of reference, the risk is presented that accountability will conceptually waste away as a passing fad or will assume a new guise and grow from that point. At the same time, research efforts are likely to remain scattered, piecemeal, and unsystematic. One has to inquire about the form of accountability being applied, the nature of the differences it is expected to make in the situation, as well as the conditions under which it was applied. A conceptual taxonomy that can be tested through various forms of application and in a variety of situations is sorely needed.

3. *Accountability has become politicized.* The process of altering relationships from general to more specified responsibilities for accountability purposes carries political implications. For organized interest groups, the politics of accountability (particularly where emphasis is placed on tightly drawn responsibilities) guarantee as much effort will be expended attacking the concept as promoting it on grounds other than dispassionate reason.

For example, the present state of education offers no definition for malpractice. Yet as the expectations, methods, and procedures of educational practice become more highly stipulated (especially by state law), malpractice definitions (particularly those regarding forms of educational negligence) are likely to emerge. Organized efforts can be expected, like those of the New Jersey Education Association, to block statewide testing programs because--to quote teacher spokesmen--"the results of a testing program will eventually

enable the authority to reward those who do his bidding and punish those who do not conform" (Rein 1974). Politically, accountability is perceived by many individuals as something desirable when done unto others and undesirable when focused upon themselves.

Such politicalization of accountability has meant there is a built-in readiness to invalidate the idea of accountability-by-results when one of its forms seemingly malfunctions in practice (e.g., external performance contracting). It must be insisted upon that the concept of accountability be separated, as a concept, from the means used to express it. To date more work has gone into developing models and applications of a partially formed idea than has been invested in developing an understandable framework for the idea. We seem to be in a position somewhat similar to that of Thomas Edison. Edison's belief in the concept of electric light, however, was sufficiently strong to carry him through hundreds of applications before he developed both his concept and applications to a point that worked satisfactorily. Many people in education have neither Edison's faith nor patience, and they tend to reject concepts pragmatically when concept applications cause problems or adversely influence group interests. Thrust into a political atmosphere where characteristic behavior is to press for instant, simple solutions to problems shallowly regarded, educational forms of accountability can expect a difficult time. Almost invariably, educational problems are complex, time-consuming, and require a kind of sophistication, patience, and expertise that does not mix well with political wrangling. On the other hand, it has largely been political pressure exerted at state and federal levels that has made accountability significant in education. Without the continuance of such "outside" political pressures, it is doubtful that accountability as a movement in education will last long against the "inside" political pressures of organized teacher groups.

In addition to these three interrelated reasons--the lack of agreement on both definitions and the direction of concept refinement, as well as the problem of politicalization--there are other issues and questions in the literature (call it

"noise" in the system) that detract from efforts to develop accountability. Some individuals question the value of educational accountability on philosophical and "humanitarian" grounds (Leight 1973) (Hills 1974). There remain questions not only about the desirability but the technological ability of the educational field to deliver some forms of accountability, particularly where testing is used (Klein 1971) (House, Rivers, and Stufflebeam 1974).

Without attempting to make this paper more elaborate at this point, it seems fair to conclude from the literature that the history of education's sharpened forms of accountability is still too brief to make a judgment that the new applications of the concept (1) are clearly superior to the old applications; (2) make significant differences in terms of results achieved; (3) create truly more accountable relationships between parties; and (4) should serve as the basis of all future development in the applied art/science of public education. It is simply too early in the concept's development in education to accept or reject such conclusions. The promise still remains, but its realization is not likely to be quick, simple, painless, unsophisticated, or effortless--the common requisites of politically acceptable change in education.

CHAPTER III

A REVIEW OF DEFINITIONS AND CONCEPTS

In applied sciences like education, there generally is believed to be a relationship between theory and practice. While it is not always clear that good practice is based upon good theory (or the reverse), the value of both seems enhanced when their goodness coincides. Probably the heart of any theory is the nature of the definitions and concepts that give it meaning. In the case of accountability, an old and simple idea was given an emphasis, dimension, and applications new to 20th-century American education. If this newer interpretation of accountability has a relationship with theory, its linkage is located in its definitions and concepts.

What is meant by accountability? As indicated above, a clear-cut definition is complicated. For example, the term appears in the literature frequently in three senses. First, its uncritical usage is synonymous with responsibility. A second usage is more critical, suggesting an obligation to explain or account for the disposition of tasks entrusted to an individual. The third sense appears in the form of a partially defined concept peculiar to education--educational accountability. This usage conveys the notion that the schools and the educators who operate them be "held to account" (i.e., held both responsible and answerable) for what they produce or fail to produce as "educational outcomes" (i.e., for what students learn).

Before education borrowed the term and inflated it with its own meanings, accountability expressed a relationship between the occupants of roles who control institutions, the "holders of power"--stewards--and those who possess the formal power to displace them--reviewers (Vickers 1965). The scope of this form of accountability includes everything those who hold formal powers of dismissal (the reviewers) find necessary in making their major decision. This decision is whether to continue or to withdraw confidence in those office holders held to account (the stewards). From this role relationship, a simple definition of accountability (as

it is traditionally understood) follows:

The requirement on the occupant of a role, by those who authorize that role, to answer for the results of work expected from him in the role (Newman and Rowbottom 1968).

But few remain simple. Change, that tenacious force of our time has been busy reshaping this simple idea. Brought into the definition now is the notion of *operationally specifying* by degree what tasks are to be accomplished by the steward--the person entrusted to execute the tasks--prior to his undertaking them. A more extended version of this shift in the original concept might be rendered as follows:

1. Accountability is a process that occurs in a relationship between those entrusted with the accomplishment of *specific tasks* (stewards), and those having power of review (reviewers).
2. The heart of the process is for the party "standing to account," the steward, to explain as *rationally as possible* the results of efforts to achieve the *specified tasks* of objectives of his stewardship.
3. Of major concern to the parties reviewing the stewardship of the tasks performed is the matching of performance and attainment levels against their expectations as *expressed in the task specifications*, and determining their level of confidence in the steward and his efforts.
4. Of major concern to the steward standing to account is his ability to accomplish the *specified tasks* as well as his ability to explain attainment levels in a manner that maintains or builds the reviewers' confidence in his stewardship.

The italicized words and phrases are intended to represent, in part, the newer modifications as superimposed on the original accountability concept. The italicized words represent accountability's newly emerging pattern (Browder 1971).

Lesley Browder (1973, pp. 6-9) offers a simple contrast between the more common form of the accountability

process and its emerging form:

COMMON FORM. Woodcutter Ames agrees to chop wood for Mr. Cotton for a "day's hire." Mr. Cotton assigns Ames his tasks, tells him what he wants done, and occasionally checks on Ames to see that the tasks are being done and that a "fair day's work" effort is being made. Ames chops wood. Mr. Cotton pays Ames for his day's work. Ames is largely accountable only for his day's work and for following Mr. Cotton's instructions (I did what you told me to do). Mr. Cotton judges for himself whether the results represent a "fair day's work" as well as what he thinks he told Ames to do.

EMERGING FORM. Woodcutter Brown also agrees to chop wood for Mr. Cotton. However, before Brown chops any wood, he and Mr. Cotton agree in writing how much wood is to be chopped, which field is to be cleared, approximately when the task is to be completed, and under what conditions the cleared field and chopped wood are to be found at the conclusion of the tasks. Different payment amounts are established for each of the tasks to be completed. Because in this case time is important to Mr. Cotton, a bonus payment is included if Brown can complete the tasks ahead of schedule. By the same token, Brown also agrees to accept a reduced payment (a "discount") if he must work beyond the agreed-upon time completion margins. Woodcutter Brown does his work without Mr. Cotton's supervision. When the tasks are completed, Brown renders an accounting of the results expected in the written agreement and those he actually achieved. Mr. Cotton checks his steward's account and pays according to their agreement for the results actually achieved.

Thus several things happen in the emerging form of accountability that are *less common by degree* in the more usual work arrangements:

1. There is first a carefully written agreement about what is expected to result from the steward's efforts, stated in terms of performance objectives with measurable or evaluative criteria. It may or may not state what rewards or penalties will be awarded by the reviewer for the results achieved or not achieved.
2. Because the description of what performance is expected is so specifically written, the steward's obligations are more pointed. He knows what is expected and what is not expected. In accounting for his efforts, it

is less easy to slough off specifically stated tasks than the more normal, loosely stated ones. For example, in the more tightly stipulated task assignment, "to remove all the trees, including their trunks, from the designated field," as opposed to the looser expectation, "to give a fair day's work," there is little doubt what is expected of the steward. He accomplishes the task or he does not. If he does not, either he already knows the consequence (if rewards and penalties are stipulated in the agreement) or he is expected to provide a convincing explanation for his failure to complete the task if he desires to retain his reviewer's confidence in his stewardship. But what is a "fair day's work," and is the reviewer more concerned about the possibility of being cheated by his steward's interpretation of it than in getting the tasks accomplished? In the emerging form of accountability, the focus is plainly on getting the tasks accomplished by the steward or finding out why said tasks were not done (with searching for alternative ways as an outgrowth of unacceptable performance).

3. Similarly, the agreement also obligates the reviewer by preestablishing the criteria of his expectations (that is, by saying specifically what differences he expects his steward's efforts to make). He cannot whimsically change his expectations in midstream, add "surprise" responsibilities ("It won't take you a minute"), or otherwise escape his own responsibility to define what he expects to happen before the steward begins the task. This early detailing of expected results avoids later familiar comments from the reviewer such as: "That's not what I want." "I thought you meant to do..." "Why didn't you do this and that too?" "Who told you to do that?" "I don't understand what you did do." "You didn't understand what I want." "But it was my understanding that..." And so on.
4. Because the tasks are both carefully designated and contain measurable criteria for evaluating the performance results, it is less necessary for the reviewer to be concerned with close or direct supervision of the steward's work; the

reviewer is concerned primarily with verification of the steward's account of his work.

5. By establishing in advance the criteria for results and the quality of these results, the reviewer's decision as to whether or not the steward's achievements are good enough or otherwise acceptable--the reviewer's level-of-confidence judgment--can be made at a more informed level. At least a yardstick familiar to both parties has been established, and it can be used to measure whether the steward's task performance (or lack of performance) made a difference. At the same time, the steward knows that if he succeeds in achieving the task objectives, he can reasonably count on his reviewer's continued confidence in his stewardship.

Applied to education, this shift toward increasing the degree of accountability by spelling out beforehand how performance is to be measured--that is, by predetermining objectives with evaluative criteria--is similar. Teaching specific skills and concepts under stipulated conditions, ensuring that each student experiences a year's learning growth (or some designated growth) in terms of himself or herself as an individual, or ensuring that a faculty, as a team, accomplishes measurable objectives toward some larger goals (philosophical or otherwise), may all be part of the predetermined expectations for educational achievement--the elements of objectives that move a school district closer toward realizing its educational goals.

Because the emerging form of accountability lends itself so readily to forms of contract negotiation, particularly in the public sector, it seems appropriate to use the phrase, *negotiable accountability*. In 1971 Browder defined negotiable accountability as:

The requirement on the occupant of a role, as determined by a negotiated contract (defining assignable, measurable units of responsibility to be fulfilled under certain conditions and within certain constraints), to answer for the specified results of work expected from him in the role in return for specified benefits accorded by results.

Naturally other definitions of accountability abound (take your pick). To varying degrees, they reflect the shift toward the emerging form discussed above. For example, note the

a parallel between Browder's "negotiable accountability" and Alkin's definition:

Accountability is a negotiated relationship in which the participants agree in advance to accept specified rewards and costs on the basis of evaluation findings as to the attainment of specified ends (1972).

Alkin's negotiated agreement between parties also envisions the written contract as the most likely vehicle for the newer form of accountability. It would specify:

1. A set of constraints
2. A negotiated statement of what differences are to be made within that constraining framework
3. The criteria for determining the outcomes
4. How the level-of-confidence issue is to be handled in terms of rewards and costs (including payment and penalty schedules)

Similarly, Lessinger (1970) also sees accountability as the product of a sort of negotiation process:

At its most basic level, it [accountability] means an agent, public or private, entering into a contractual agreement to perform a service will be answerable for performing according to agreed-upon terms, within an established time period, and with a stipulated use of resources and performance standards.

The contract agreement form of negotiable accountability, with its explicitly written stipulations for expected and measurable performance outcomes, its framework of constraints, and its schedules for according benefits and/or penalties by results, perhaps represents the most extreme form of the concept's transition. Somewhat less extreme in its implications is Lopez' (1970) definition:

Accountability refers to the process of expecting each member of an organization to answer to someone for doing specific things according to specific plans and against certain timetables to accomplish tangible performance results.

Even less rigorous is Lieberman's (1970) assertion that the purpose of accountability is fulfilled "when resources and efforts are related to results in ways that are useful for policy making, resource allocation, or compensation."

Moving conceptually from expressing a role relationship into a system format, Henry Levin (1974) views accountability systems as a closed loop reflecting:

...a chain of responses to perceived needs or demands; an activity or set of activities that emerges to fill those demands; outcomes that result from those activities; and feedback on outcomes to the source of the demands. The feedback may generate new demands or a regeneration of the old ones; in either case, the previous set of activities may be modified or remain intact; a new or an altered set of activities may be modified or remain intact; a new or an altered set of outcomes may be produced; and the loop is completed again with feedback to the source of demands. (p. 375)

Where the linkages are tight in the accountability system and information is generated and dispersed freely, the system flows continuously and dynamically. It is less responsive and, hence less controlling, when these conditions are not met.

Concerning the task of assigning or establishing levels of responsibility, or the "who-is-accountable-to-whom-for-what" issue, Alkin (1972) offers some useful concepts. He sees three levels of accountability systems:

1. *Goal accountability.* School boards (state and local) are accountable to the general public (through the election and/or appointment process) for everything they do, but particularly for ensuring that the appropriate goals and objectives are being pursued by the state or local school district, through authorized programs.
2. *Program accountability.* Responsibility for programs that translate goals into sets of specified objectives rests generally with administrators and those persons involved in the selection, modification, and adoption of the programs, and thereby the administrators make themselves accountable to the board.

3. *Outcome accountability.* An instructional leader (usually a teacher) is accountable to administration for specified pupil outcomes which are thought to be a function of teacher management of the instructional program. That is, a teacher manages an instructional program which has certain product capabilities; the challenge is to determine whether the teacher has managed the program in such a way as to achieve standards or criteria that might be expected from the program.

While the above brief description hardly does justice to Alkin's well-developed thesis, it points toward a rough approach to the apportioning of accountable responsibilities. At the point of applying this concept, the difficulty of this process of finely separating responsibilities is, as Lennon (1971) has cited, enormous. Both Barro (1970) and Dyer (1970) indicate the great complexity of the data-gathering task and of the analytical methods used to assign responsibility to contributing parties when the accountability concept is applied. Both Barro and Dyer, as well as Klein and Alkin (1972), rely on the use of multiple regression analysis, a statistical procedure, to isolate outcome accountability as an applied concept.

While the researchers worry about the theoretically pure points of the responsibility-assignment process, the practitioners manage to work out enough of the problems to permit action (Alameda County School Department, 1972; San Juan Board of Cooperative Services, 1974). Solutions to concept application problems are as likely to be found in forms of negotiated accountability as they are in technological and procedural breakthroughs like multiple regression analysis.

What might be concluded from the literature's definitions and concepts? Some reflection yields the following insights:

1. Conceptually, the thrust of accountability in education has its roots buried in control theory. Accountability may be viewed as a *phenomenon of control theory*. The field of education is a relative newcomer in terms of modern usage of control theory applied to the management of planning-decision-performance-control problems considered as one comprehensive system. With the fields of engineering and mathematics setting the pace of theoretical development,

research and conceptual refinement of forms of management control have been undertaken in such fields as accounting, economics, industrial psychology, computer science, systems engineering, and only recently in education. Conceptually linking accountability as an aspect of control theory moves it into theoretically deeper and richer (for application) waters.

2. A reciprocal relationship can be expected between the refinement of specific applications of control theory in different fields (with educational accountability being one of its newer forms in the educational field), conceptual growth of basic control theory, and the emergence of new applications from the further developed theory base. That is, while the peculiarities of each field will create operational nuances for that field's form of application, the field should be able to contribute to the conceptual growth of control theory and draw from the fundamental theory fresh new forms of application for its use. Thus we have a case of multiple practices and applications in many fields feeding a conceptual base, which, in turn, produces insights for fresh application in the various fields.

If these assertions have merit, the implication is that the field of education should look at the conceptually richer domain of control theory, viewing forms of educational accountability as a manifestation of it, rather than attempt to reinvent the wheel in the sense of developing new vocabularies and jargon to express an existing theory.

What are the grounds for making this linkage between accountability and control theory? Perhaps this conceptual linkage is best seen in related organization theory literature. For example, organization theorist James Thompson (1967) claims *uncertainty* to be the fundamental problem of complex organizations and coping with uncertainty the essence of the administrative process. This coping process characteristically is aimed at increasing certainty in an open environment that is forever producing uncertainties both within and without the organization--a concept Thompson labels (p. 9) the "Simon-March-Cyert stream of study" (Simon, 1957a; March and Simon, 1958; Cyert and March, 1963). Accordingly Thompson conceives of complex organizations as "open systems, hence indeterminate

and faced with uncertainty, but at the same time as subject to criteria of rationality and hence needing determinateness and certainty" (p. 10).

This mixture of permanent but variable uncertainty and the perennial struggle of organizations to reduce it to tolerable levels of certainty and predictable consequence opens the door of control theory. As Dorwin Cartwright maintains, "The view prevails that every organization has a basic objective, and to be viable it must have some control system to guarantee accomplishment of this objective" (Cartwright, 1965, p. 2). In the sense of moving toward the elimination of uncertainty or randomness and increasing certainty and predictability of accomplishment, control theory and accountability share the same concept.

What makes control theory the parent concept and accountability its child is that control theory covers both man and machine as a concept. It need not restrict itself to man alone (as accountability does) and the fuzziness of uncertainty, randomness, or disorder that can only be reduced, but never eliminated, from organizations which need to rely on authority structures, role relationships, and/or power and influence arrangements to motivate individuals. Simon's phrase, "bounded rationality" (1957b), seems apt in describing one of accountability's conceptual limitations.

Control theory, however, is rationally unrestricted. Its only requirement is that of directing a set of variables toward a preconceived objective. Norton Bedford (1974) explains:

For control to exist there must be something, an activity or a process, to be controlled. But this is not sufficient, for whether the something to be controlled is the actions of a person, a machine, a group of resources, or any process, control cannot be applied unless the way in which the variable components of the process are to be directed has been determined. That is, an objective or goal must be specified for the process, entity, or activity to indicate the way in which it is to be directed. But given a process and specified objectives, a control problem exists (p. 508).

Thus, in the theoretical sense, control may be defined as "the process of specifying preferred states of affairs and revising ongoing processes so as to move in the direction of these preferred states" (Etzioni, 1968, p. 45).

Confined to organizational structure, however, Amitai Etzioni (1965) qualifies control as "a distribution of means used by an organization to elicit the performance it needs and to check whether the quantities and qualities of such performance are in accord with organizational specifications" (p. 650). Within this narrower dimension and as a part of control theory's means of distributing and directing organizational activity lies accountability, a role relationship between people. As mentioned above, simply defined, accountability is "the requirement on the occupant of a role, by those who authorize that role, to answer for the results of work expected from him in the role" (Newman and Rowbottom, 1968, p. 26).

There also is another dimension of control theory that seemingly has awakened renewed attention in the educational field. Reflecting on the nature of control, Bedford (1974) comments, "In the general sense that control is itself a process that ensures that what 'ought' to be done is done, a sense of 'oughtness' underlies the control concept" (p. 509). Echoes Frank Jennings (1972), "Now we pronounce accountability, a firm protestant word, to label tasks we promise to do better than we have done before...Accountability, whatever meaning we infuse it with, refers essentially to moral behavior" (p. 333). In a sense, it is control theory's quality of "oughtness" and its drive toward insuring that what ought to be done is done, that seemingly infuses the newer forms of accountability with moral determination to drive out uncertainty of accomplishment in education by altering the nature of its expectations. By simply *operationally specifying by degree*--"by degree" in a sense ranging from being highly specified about some educational tasks (e.g., learning number facts, the alphabet, etc.) to being less specified about other tasks (e.g., developing attitudes, appreciations, etc.)--what tasks are to be accomplished by the steward--the person entrusted to execute the tasks--prior to his undertaking them, a new force (one consistent with control theory's drive toward eliminating uncertainty) is added to the term "accountability."

How might this change in concept be applied? What does the literature tell us?

CHAPTER IV

A LOOK AT EXPRESSIONS OF THE ACCOUNTABILITY CONCEPT APPLIED TO PUBLIC EDUCATION

Before examining the manner in which the accountability concept is applied to specific practices in public education, it seems worthwhile to indicate the presence of three broad movements that appear to exist at the same point in time and lend applications of the accountability concept much of their thrust. Each of these movements has a literature of its own and tends to support and undergird various applications of accountability. In this regard, it is difficult to delineate when and where some pieces of the literature should be classified. In a sort of artificial sense then, the literature is being arbitrarily broken into two sections: (1) a literature supporting the application of accountability concepts, providing a favorable climate for accountability practices; and (2) a literature that--by degree--is directed at specific practices and applications of the concept in public education.

The Literature Supportive to Applications of the Accountability Concept in Public Education

As indicated above, the literature supportive to applications of the accountability concept in public education is reflected in three broad movements. First, *change pressures* of our times--political, social, and economic change pressures--are demanding institutional responsiveness to perceived problems, and public education has its share of perceived problems. Secondly, *technological advances* have developed to a point where applications of emerging accountability patterns appear feasible--at least worthy of trying in the absence of other forms of responsiveness. Finally, the emergence of *behavioral objectives* in education has greatly enhanced the ability of educators to determine whether something has happened with the learner.

Change Pressures.

An analysis of the pressures of our times should not require much elaboration. From even casual attention to the

daily news media of our society, one is likely to get an impression that there are degrees of discontent with public education at nearly all levels and in nearly all communities. Whether the upset parties be minority groups, students, parents, taxpayers, teachers, boards of education, politicians, social reformers, and/or school administrators, a belief exists that public education could and should operate better than it does. And, while not always in agreement as to whom the party should be, it is believed operation can be made more effective and responsive by holding someone more strictly accountable. In sum, these pressures create a climate of opinion for change within which the notion of accountability has strong appeal. As Barro (1970) expresses it: "Under the accountability banner, otherwise diverse programs for educational reform coalesce and reinforce one another, each gaining strength and all, in turn, strengthening already powerful pressures for educational changes."

A reform-minded line of reasoning is directing the emerging patterns of accountability into education. This effort can be traced to Washington, D.C. as a sort of spillover from the launching of the Elementary and Secondary Education Act of 1965 and the federal efforts since then in the field of compensatory education. Simply expressed, this reasoning holds that:

1. The educational evaluation of the schools and their programs--their performance measurement--is most important. In fact, the belief holds that schools should be monitored regularly with the results critically assessed and made public knowledge.
2. A similar, close reporting should be made on the cost inputs of educational programs and their resulting benefits as derived in measurable cost/effectiveness terms.
3. An old educational cliché should be put to the test and the schools should be held responsible for devising programs that "meet the needs" (operationally defined) of all students, from the most endowed to the least endowed.
4. The people whose children are being educated in the schools should have a closer partnership and form of participation in this matter--a partnership with a hand not far from the controls.

This line of reasoning received its most forceful public expression in President Richard Nixon's March 3, 1970, "Message

on Education Reform," which opened with the flat statement: "American education is in urgent need of reform." A few excerpts from this representative message illustrate the above points:

What makes a good school? The old answer was a school that maintained high standards of plant and equipment, that had a reasonable number of children per classroom, whose teachers had good college and often graduate training, that kept up to date with new curriculum developments and was alert to new techniques of instruction. This was a fair enough definition so long as it was assumed that there was direct connection between these school characteristics and the actual amount of learning that takes place in a school.

Years of educational research, culminating in the Equal Education Opportunity Survey of 1966, have, however, demonstrated that this direct, uncomplicated relationship does not exist.

Apart from the general public interest in providing teachers an honorable and well-paid professional career, there is only one important question to be asked about education: What do the children learn?

Unfortunately, it is simply not possible to make any confident deduction from school characteristics as to what will be happening to the children in any particular school...

One conclusion (however) is inescapable: We do not yet have equal educational opportunity in America.

To achieve this...reform it will be necessary to develop broader and more sensitive measurements of learning than we now have...new measurement of educational output...

From these considerations, we derive another new concept: accountability. School administrators and school teachers alike are responsible for their performance, and it is in their interest as well as in the interests of their pupils that they be held accountable. Success should be measured not by some fixed national norm, but rather by the results achieved in relation to the actual situation of the particular school and the particular set of pupils.

In total, from the pressures of the times in which we live, a literature has emerged that might be labeled the rhetoric of accountability. In addition to President Nixon's statement, positive "We-need-it" commentary can be seen in articles and talks by such public figures as Terrel H. Bell, former Deputy Commissioner for School Systems and now Commissioner, U. S. Office of Education (1970); Don Davies, former Deputy Commissioner for Development, U. S. Office of Education (1970); U. S. Representative Edith Green of Oregon (1970); Governor William Milliken of Michigan (1970); Russell Peterson, former Governor of Delaware (1970); and many others. An excellent collection of such utterances--referred to as "The Call to Accountability" instead of rhetoric--is found in Frank Sciara and Richard Jantz's edited work (1972, pp. 3-226). These editors provide representative statements from federal, state, and local levels as well as from a variety of spokesmen. Additionally, an extensive bibliography is offered. The more recent edited work of Richard Hostrop, James Mecklenburger, and John Wilson (1973) offers a similar (but less extensive) "Call to Accountability" section (pp. 1-72):

Technological Advances.

While the change pressures of our age were building a publicly receptive climate for accountability, the burgeoning of new technologies was providing some necessary conceptual underpinnings. The source of this stream again can be traced back to Washington, D.C. Faced with the task of solving so many problems stemming from the national defense in World War II and from the subsequent cold war race for increased armament capabilities and space ventures, a series of conceptual frameworks were necessary to permit many different disciplines to work together. This series of frameworks developed around the notion of "systems."

A system, simply defined, is a "set of objects together with relationships between the objects and between their attributes" (Hall and Fagen 1956). While this definition is too skeletal to offer much sustenance for initial understanding, it does express the common relationship between the more than 40 terms used to express forms of its use. At the same time, its parallel to the accountability concept and control theory should be noted.

In general, forms of the system concept seek to explain, as rationally as possible, "relationships between objects" in a manner that permits close scrutiny of the objects as well as how they fit together in a larger system or part of a system. Usually this explication is done by building and analyzing abstract models of the empirical world representing the "necessary and sufficient" relationships of the items

being considered. For Anatol Rapoport (1966), it means that "general systems theory subsumes an outlook or a methodology rather than theory in the sense ascribed to this term in science."

Thus the systems concept performs an integrative function in its application and appears to fuse together for several purposes the contributions of many disciplines that would otherwise be strange bedfellows. The impact of these advances (under the systems banner) on the school administrator, for example, operating as a generalist in the social-behavioral science milieu of an educational, organizational, and administrative world, is powerful: "It can be used to counter the trend toward myopic fractionalization of knowledge that renders the generalist obsolete" (Hartley 1968).

Expressions of the systems concept have assumed many forms. In the social sciences alone, multiple system conceptualizations have emerged. For example, David Easton (1965) developed a framework for analyzing political systems; the field of economics generated a whole series of systems analyses (including input-output-analysis, econometric models, and benefit-cost analysis); sociology contributed theories of social systems through the writings of Talcott Parsons (1965) and others (March 1965). Even management found uses for analytical system techniques, spawning operations research (OR); management information systems (MIS); program evaluation and review techniques (PERT); critical path method (CPM); cost effective analysis (differing from the economic focus of benefit-cost analysis by accounting for a variety of noneconomic objectives also); and plan-program-budget systems (PPBS). Interpretation of each of these approaches falls beyond the scope of efforts here. Their significance for us lies in the fact that they provide a larger variety of ways to view problems--alternative ways that are logical, systematic, comprehensive and, above all, rational. Representative works of this genre of thought are reflected in the works of Novick (1967), Lyden and Miller (1968); and Clelland and King (1969). More direct applications to public education will be examined below.

At its best, systems analysis represents an approach through rational technology that seeks to clarify what is known, to isolate what is unknown, to stimulate future behavior, to handle fantastically complex interrelationships and, when different combinations of inputs are introduced, to yield insights into the likelihood of future outcomes from alternative approaches. As a methodological vehicle for accounting for differences made by performance, it is ideal.

Behavioral Objectives.

While new applications of systems concepts were evolving, the field of education was at the same time developing a thrust vital to any considerations of accounting for educational performance, namely, "behavioral objectives." Receiving a major impetus from the scholarly work of Benjamin Bloom and others in the *Taxonomy of Educational Objectives* handbooks (1956, 1964) and popularized forms of application in Robert Mager's *Preparing Instructional Objectives* (1962) and *Developing Attitude Toward Learning* (1968), the behavioral objective movement has made considerable progress.

Behavioral objectivists are concerned with educational measurement and hold that, if a child learns, his behavior will change. This changed behavior, in turn, is possible to observe or otherwise measure through various means. Thus, if the child's behavior changes as he learns, it makes sense to develop educational goals and objectives in forms of the kinds of learner behaviors desired. It then follows that the instructional program may be geared to developing these desired behavior changes.

While the behavioral objectivists were studying changes in learner outcomes and shifts in behavior, the educational field was becoming increasingly receptive to this sort of thinking. In 1960, Jerome Bruner's *Process of Education* captured the attention of many practicing educators while public concerns about the state of American education, stemming from Sputnik, Rickover, Conant, and others, helped support an unprecedented era of innovation and change in elementary and secondary education. Many of these changes (e.g., continuous progress education, nongraded instruction, team teaching, individually prescribed instruction, computer assisted instruction, etc.) depend on knowing, with some precision, how the student has progressed in his learning. The methodology of drafting behavioral objectives aids this movement where teachers attempt to assess student needs and prescribe objectives that are appropriate (i.e., that reflect considerations of the nature and needs of the learner, his society, and the content to be learned).

From behavioral definitions of learner outcomes and increasing demands of teacher groups for greater rights in determining educational decisions, it is but a short step to one more conclusion: the responsibility for moving the learner, from a state in which he cannot demonstrate a desired behavior to one in which he can, is shared. The student is responsible for making an effort to learn. The teacher is accountable for the learning outcomes achieved and for the professional effort made in the process.

Although the systems technologists and the behavioral objectivists started their reform movements separately, it was, as Erick Lindman stated in 1970, "inevitable that they should discover each other and find they had so much in common." Combined with the pressure of the times, the notion that accountability could and should be more rigorously applied to education gained currency. Why should persons employed by the public to provide a service (and given considerable latitude in determining how and under what conditions the service will be rendered) be exempt from standing to account for the results of that service?

The premise of this argument is not seriously, or at least openly, challenged. The problem lies in the manner of making educational accountability operational. The issue of "who is accountable for what to whom" in education is complex but, argue the change pressures of the times, necessary and, suggest the new systems-based technologies and behavioral objectives, possible.

Applications of the Accountability Concept

A variety of approaches, singly or employed with others, have been proposed to make the public schools more accountable by degree. At least five broad approaches may be noted: (1) developing greater management sophistication among educators; (2) use of educational program auditing and public information; (3) developing and implementing defined levels of performance expectations; (4) quickening institutional responsiveness through increased local participation and semi-autonomy; and (5) an appeal to an alternative form of education.

Developing Greater Management Sophistication Among Educators

This approach depends upon acquainting educators generally, and administrators specifically, with the developments in the systems-based technologies, particularly those that stress management control. Presumably the schools could be made more accountable by making more critical and effective uses of their resources through employing these technologies (e.g., PPBS, PERT). For example, in the foreword of a book on educational "project management" (one of the system-based derivatives), an official of the U. S. Office of Education contends that demands for accountability can be helpfully accommodated with the development of "management sophistication" among educators. He maintains:

Although the necessity for competent management is part of the conventional wisdom of business and industry, the concept of educator as manager ..

is just being accepted--gingerly.' Although educators...may indeed have 'functioned' as managers--manipulating resources and coping with multiple demands to meet certain ends--the tools devised by managers in other fields have not been available to them, nor has the relevance of such tools been immediately apparent (Cook 1971).

James (1969) observed, "More recently a newer priesthood of economists and political scientists has joined the engineers in advising government about improving schools, and schoolmen now have a new catechism to learn." This catechism of system-based technologies has come a long way. At least that is what the new priesthood believes. In addition to Cook and Hartley, the works of Thomas (1971), Banghart (1969), Kraft (1969), Kaufman (1971), and Van Dusseldorp, Richardson, and Foley (1971) serve as examples of the new systems-based catechism applied to education. Titles like *Perspectives on Management Systems Approaches in Education* (Albert Yee, editor; 1973); *Accountability: Systems Planning in Education* (Creta Sabine, editor; 1973); and Robert Thompson's *A Systems Approach to Instruction* (1971) illustrate the systems influence.

Use of Educational Program Auditing and Public Information.
These devices stem from traditional public fears that people are not being given the full truth about the quality of their children's education. To help bridge this credibility gap and keep the schools honest in their labors, either an educational program auditor (EPA) is employed and/or "hard data" on school performance (test scores, etc.) is publicly released. In the case of the EPA, this person "audits" or otherwise critically evaluates specified portions of the school program, from specifically designated programs to building level programs, or even the total district program. Although there are several obvious differences between the two roles, the EPA acts somewhat similarly to a certified public accountant; both represent an independent, external, quality-control agency. Kruger (1970) notes:

The Educational Program Auditor does not operate the evaluation system, as the fiscal auditor does not operate the accounting system--yet both use their expertise, objectivity, and perspective to improve the quality of these performance-control systems, and thus indirectly influence the quality of overall program design and management without diluting the responsibility or authority of program management personnel.

While not necessarily advocating the specific use of educational program auditors, other works are concerned with getting before the public an accurate picture of what is happening in our schools. Illustrative of such literature is Gene Hawe's outstanding article (1972) on the efforts of several school districts to report publicly their students' achievement test results. A more reflective look at the problem of presenting public information about the schools was undertaken by Wynne (1972), who views accountability as "systems or arrangements that supply the general public, as well as schoolmen, with accurate information about school output performance--test scores, and other data that show how well groups of children are learning in school." Examples of such efforts put into field application are seen in elaborate local district reports like *The Columbus School Profile* (Ohio, 1969), *Profiles of Achievement* (Tulsa, Okla., 1970), and *The New Rochelle School Profile* (New York, 1971).

Developing and Implementing Defined Levels of Performance Expectations.

The development of defined performance expectations is bound to be the most difficult, and probably the most significant, feature of the accountability movement. As one veteran practitioner remarked, "Getting any six people to agree on general things in education, let alone behavioral objectives, is god-awful." In 1957 Paul Woodring raised a powerful set of questions: Should the schools be responsible for the child's intellectual development only, or should they be responsible for the individual's social, moral, religious, vocational, physical, and emotional development, as well as for the youngster's recreation? If the schools are to be responsible for everything, is everything of equal importance, and if not, what is the order of priority--what comes first? Clear answers to these questions have never been resolved in most communities, and--without local pressure for educational accountability--are likely never to be resolved. Accordingly, specific educational behavioral objectives probably will continue to be worked out by school staff members and will be restricted to the academic areas in application.

A more clearly defined consensus concerning what the schools should be accomplishing will be necessary, however, if accounts are to be rendered and if people want to know whether a difference is being made in the learning behavior of their children (i.e., whether their children are learning what is intended or not). Arriving at a consensus about what is to be learned in school is no easy task. One superintendent, describing his lack of success at building a working consensus in his community, noted, "There's a lack of good will. That's the problem. People come on as members of a political party

to fight, and they fight." Though difficult, the task is to achieve general agreement as to the major educational goals of school districts, spelled out in performance objectives to a point where learner progress toward the objectives can be assessed with meaning. It should not be impossible to develop some graduated acceptance of a goal such as "reading with competence," behaviorally defined as Browder, Atkins, and Kaya (1973) suggest. Indeed, there is pressure for this kind of progress from many state legislatures and state education departments as such programs as the seven-state Cooperative Accountability Project (involving Colorado, Florida, Maryland, Michigan, Minnesota, Pennsylvania, and Wisconsin) imply. (There will be more discussion later on determining the "will of the people" in the selection and ordering of educational goals and objectives for which to stand accountable.)

Meanwhile, taking cues from Bloom's taxonomy and the earlier works of other pioneers like Robert Glaser (1963) in behavioral objectives, an entire field has developed on the nature and ways of creating educational performance objectives as well as ways of determining whether or not the objectives have been achieved. *Criterion-referenced* forms of evaluation of student learning outcomes have come into being. Whereas most standardized testing programs in school districts yield *norm-referenced* data (that is, they report on local student performance in terms of how well the local students compare against the statistical performance norms of other students across the nation taking the same test,) criterion-referenced evaluation concentrates on determining whether an individual can demonstrate possession of a particular attitude, skill, or piece of knowledge. The focus is on what he can or cannot do--not on how well he compares with the national peer group. In addition to Kemp's (1974) extensive bibliography, Keller (1972) also provides a good bibliography on this vast criterion testing literature. Articles by Hawes (1973) and Millman (1970) offer good insights into applications of criterion-referenced forms of evaluation.

Concerning the literature of performance objectives generally, works by such individuals as Glaser (1963), Popham (1971), Payne (1968), Leles and Bernabei (1969) and many others, including critics (Eisner 1967), crowd the bookshelves. The creation of the Center for the Study of Evaluation in 1966 and its subsequent Instructional Objectives Exchange (IOX) program is perhaps a major landmark in the development of accountable performance objectives. At the same time, commercial groups have published criterion-referenced tests such as CTB/McGraw-Hill tests in 1971, the "Prescriptive Mathematics Inventory," and in 1972, the "Prescriptive Reading Inventory,"

or Science Research Associates' "Diagnosis Instructional Aids" issued in 1972.

Developing a consensus and commitment to defined levels of expectations is difficult; implementation of specified performance objectives is also. The school system conventionally is held accountable by the school board primarily for "staff performance" (i.e., the staff is held responsible in a generalized sense for knowing and doing things supposed to help educate the student). Until fairly recently, the entire system of teacher certification, school accrediting procedures, and similar structures buttressed this generalized assessment of staff performance. This system is further reinforced by the granting of a form of lifetime appointment--tenure--nearly automatically or according to length or undisputed service within a reward structure based on the "unified salary schedule," which emphasizes length of service and graduate credits as the only significant variables. Such a system depends a great deal on the individual teacher's own sense of dedication and professionalism in a profession where there is no definition of malpractice. The newer form of accountability alters this condition, however, by shifting the focus to pupil performance (rather than to the staff alone); the emphasis is placed on results, or producing specified levels of student accomplishment. Among the more recent expressions of this shift in performance expectations are competency-based teacher education, and "external" and "internal" forms of performance contracting.

As a result of the request by the U. S. Office of Education for ways of noticeably improving teacher training in its Elementary Models Project in the late 1960s, ten teacher training models were developed independently by various colleges and universities. Significantly, each of these models tended to base itself on the concept that there are certain key "competencies" (mastered or acquired skills, attitudes, and knowledges) that prospective teachers should be able, in some manner, to demonstrate. The idea spread. By 1973 ten states had adopted certification changes, and others were planning to consider them actively, based on demonstrated competencies or performances (Schmieder, 1973). Crucial to competency-based teacher education is the use of behavioral objectives known to the learner and instructor alike prior to the learning experience. Instruction focuses primarily on achievement of these objectives. As Houston and Howsam (1972) note, the teacher-in-training knows "he is expected to demonstrate the specified competencies to the required level and in the agreed-upon manner. He accepts responsibility and expects to be held accountable for meeting the established criteria." The advocates of competency-based training thus hope to peg certification for both teachers and administrators on demonstrated

performances and/or competencies. In addition to various state departments of education, the American Association of Colleges for Teacher Education has undertaken major efforts in the area of competency-based teacher education. This movement has its supporters (e.g., Rosner 1972) and its critics (e.g., Broudy 1972). Its future appears uncertain (Rosner and Kay 1974).

Another approach, largely conceived by Leon Lessinger (1970a, b, c) and focused directly upon specified achievement test gains of students, involves the use of *performance contracting*. Usually an outside, independent agency or firm contracts with the local school board to attain specified levels of student achievement and to be paid in accordance with the measure of success obtained. The most publicized experiment to date was the one in the late 1960s in Texarkana, that city straddling the border of Texas and Arkansas. By fall, 1970, the Office of Economic Opportunity (OEO) had undertaken the funding direction of 18 such experiments involving six educational technology companies. Considerable literature began to appear (for a good sampling, see Campbell and Lorion 1972, and AASA 1972). On January 31, 1972, OEO released a statement indicating, "There is no evidence to support a massive move to utilize performance contracting for remedial education in the nation's schools." While there is evidence that the OEO report may have been premature (Blaschke 1972) and that much affirmative information on the process exists (Carpenter and Hall 1971), the withdrawal of OEO funds as well as organized teacher group resistance (Shanker 1972) has done much to dampen enthusiasm for performance contracting. Certainly claims by some early evaluations (e.g., *Performance Contracting in Education: The Guaranteed Student Performance Approach to Public School System Reform*) overstate the case.

"Internal" performance contracting is still another variation of accountability implementation. Under this plan, local teacher teams submit performance contracting bids to their board of education. Contract specifications include the instructional objectives, the targeted student population, the time period involved, and the educational costs (i.e., salaries, overhead, materials, and subcontracting costs for teacher aides from the community or special consultants, as needed). The degree of accountability is negotiated by representatives of the local teacher association. The bid awards are regular contracts for specified results. Various systems-based technologies (e.g., plan-program-budget systems and project management techniques) work neatly into this approach. Differentiated staffing patterns that link salaries with student achievement as well as staff performance also are compatible (English and Sharpes 1972). Under a grant from the Education Professions

Development Act (EPDA), the Mesa (Arizona) Public Schools are attempting such a plan. As English and Zaharis (1971) note:

The value of the internal educational performance contract is that it is regulated by teachers through their own professional organization. Governance through peer regulation and evaluation is meshed with the real reward structure. This, in turn, is rooted firmly in client growth. Such an approach may unite accountability and governance at the operational level.

Internal performance contracting presents an interesting alternative.

Quickening Institutional Responsiveness Through Increased Local Participation and Semiautonomy.

This avenue seeks to increase accountability in two ways. The first is expressed by removing the major locus of power from the usually more centralized, distant sources and giving decision-making powers to the various participants on the scene. The second--closely related to developing defined levels of performance expectations and publicly reporting results--is concerned with applying techniques to ascertain the educational will of the people (that is, determining what the local community's expectations are for its schools). Thus the schools' stewards can be assured they are working on the tasks desired by the community-at-large and supposedly are supported by said community.

In the first form, increasing local participation makes the schools more responsive via shared decision-making powers between school authorities and the people whose lives are touched by the schools. In a gross sense, it is accountability through political exercise. By concomitantly decentralizing the administrative structure, the local administrator is usually more "in harmony" (e.g., if it is a black neighborhood, the administrator is black) with the setting of the neighborhood school and, accordingly, the administrator-on-the-scene is more beholden to local groups. His tenure in office depends on the community. As Summerfield's (1971) *Neighborhood-Based Politics of Education* reveals, such neighborhoods usually find their petitions heeded by extremely responsive administrators. Gittell (1967), Cunningham (1969), Usdan (1969), and many others describe this political exercise at length, leading toward decentralized administrative control and neighborhood semiautonomy.

At the same time, if local pressure is not sufficient, pressure for increased participation comes also from Washington.

Starting in October, 1970, a memorandum was sent to all chief state school officers. Then Acting Educational Commissioner, Terrel H. Bell, pressed the issue of parental involvement in ESEA Title I projects. Specifically, the local educational agency is required to state how its parent councils:

1. Provide suggestions on improving projects or programs in operation
2. Voice complaints about projects or programs and make recommendations for their improvement
3. Participate in appraisals of the program
4. Promote the involvement of parents in the educational services provided under ESEA Title I

Further, a description is mandated of the means by which the local people have an opportunity to inspect the Title I application and present their views prior to its submission. Reports also must be filed stating how complaints of parent councils on Title I projects have been handled. Such activities certainly ought to encourage the responsiveness to accountability that comes through the application of political exercise.

The second avenue seeks accountability through community involvement for the purpose of determining the community's expectations and establishing its consent for the educational efforts undertaken by the schools. Perhaps the most significant work currently being done to develop community-level consensus and involvement in the definition of its educational tasks is the Phi Delta Kappa project on "Educational Goals and Objectives." Developed and field-tested by Keith Rose (1971) and Carroll Lang, this "Model Program for Community and Professional Involvement" seeks to involve members of the community, the schools' professional staff, and students in (1) ranking the community's educational goals in order of importance; (2) determining how well the schools' current programs meet the ranked goals; and (3) developing performance objectives to meet the ranked goals. Particularly exciting about this approach is the relative success of involving so many people in the process and getting the project completed fairly rapidly (within six months to a year) for not too great a financial outlay (Lang and Rose 1972).

The Delphi Technique is another approach for involving many persons in definition and development of a consensus for

large-scale organizational goals that subsequently can be broken down into the kinds of measurable performance objectives which make tighter accountability possible. Such a technique, originally used to get expert opinion on future technological breakthroughs in the defense industry (Helmer 1967), operates by asking selected persons to render certain forecasts (if getting best-judgment or expert consensus on the likelihood of future events is your goal) or to offer particular sets of opinion (if getting community or group consensus on goals, objectives, and their priority is your aim). This is done individually (questionnaire style) and without face-to-face consultation. The compiled results of the initial form of this opinion survey are returned to the participants with a request that they review the collective results, change their own estimates, if desired, or explain why they happen to fall outside the majority range of expression, if such is the case. This process may be repeated two or three times with an eventual emergence of some consensus on all issues. The appeal of the Delphi Technique to rationality and anonymity allows for the convergence of a majority opinion. It also permits identification of an articulated minority view without the usual intense heat of argument or undue influencing of opinion (other than by group pressure) by certain influential persons from whom others may take their response cues. Its cumbersome administration qualities and other features can reduce enthusiasm for its use (Weaver 1971), although it does the job intended (Cyphert and Gant 1970).

A wide variety of other techniques also are available for determining the educational will of the people. Operating on the opposite premise of the Delphi Technique's attempts at minimizing heated conflict by rationalizing the community involvement process through analysis is the Charette, a French term derived from a little cart, or *charrêtte*, used to carry student architectural exhibits to the academy for display while the students made frantic, last-minute finishes on the project. The term came to connote among architects intensive "cramming" to solve problems. Applied to community involvement, it is a process that, by design, meets conflict head-on in an intensive confrontation setting. Used in ghetto districts of Baltimore, New Jersey, and San Francisco to involve the neighborhood community in educational facility planning, groups of architects, administrators, students, teachers, politicians, public officials, and various residents of the neighborhood met for extended, concentrated periods of time to develop consensus solutions to planning problems. Inevitably, conflicts of interest emerge (Williams 1970).

The basic rationale of the Charrette is that conflict can be created and constructively channeled. This constructive

shaping is supposed to occur by reducing the social distance between the Establishment (legal authority) and the other participants. By creating a situation in which the key decision makers of the Establishment, neighborhood representatives, and others meet face to face (a literal translation of "democracy in action") in the belief that the organization cannot isolate itself and must find support for its operation in the neighborhood, much faith is placed in the open forum manner of resolving conflict. When a spirit of cooperation emerges from the Charrette (a spirit somewhat similar to successful around-the-clock negotiating sessions when key issues are resolved), decisions can be made rapidly and the basis of involvement judged fruitful. It is supposed that by open decision making, arrived at by all parties, the school will be more responsive--hence accountable--to the people (Mylercraigne 1971).

A more familiar approach in gaining an "accountable perspective" on the will of the community and forming a consensus among its members is the technique of polling. For example, in Oakland County, Michigan, it is possible for schools to get information through the use of an "inforet" system--an "information return" polling procedure that gathers, computer analyzes, and reports information in a month's time. By using consultant expertise, volunteers (housewives, senior citizens, etc.), random samplings of the target populations (e.g., the general community, subgroups within the community, teachers, and students), and a computer to sort out information, Waterford, Michigan, has been able to keep the 1970 costs of the inforet program fairly low--about \$250 per polling. The volunteers (20 to 30 of them) are trained in telephone as well as face-to-face group and individual interview techniques. When possible they use the telephone; questionnaire mailings are seldom used because of limited response. On a normal, single-issue poll, little more than 15 hours of work are required "by a single interviewer to produce 95 percent reliability" (Stark 1971).

As a feedback system to clarify the otherwise amorphous-appearing will of the community served by the schools, techniques like inforet, properly applied, appear useful. Quickened institutional responsiveness through definition of the community's standards of desirability (its goals) as well as identification of areas of difficulty and community priorities seem possible. An idealized view of what should occur between the community and the schools is illustrated in the 1971 version of the Joint Committee on Educational Goals and Evaluation of the California State Legislature's "Principles of School-Community Planning and Action":

1. The board of education and superintendent of schools should jointly propose and initiate the goal-setting process as a response to felt needs within the community.
2. Every community member should be invited to participate in the goal-setting process.
3. The search for goals and objectives relevant for education in the 1970s should be the start of an on-going effort to involve the community in school policy development.
4. The goal-setting process should be kept open to all points of view without domination or intimidation by any special interest group.
5. The purpose of bringing people together is not to dwell on past deficiencies, or lay blame, but to evolve a philosophy, identify needs, determine goals and program objectives, and establish priorities.
6. Participants should not expect to have everything their way; they should come seeking a better understanding of the community, its people and problems.
7. A spirit of cooperation and trust should be established among individuals and groups involved in the process.
8. Roles of leadership in school-community planning should be earned on the basis of consensus rather than on authority.
9. Individuals and groups that are instrumental to the goal-setting process should provide for the open flow of information.
10. The individual school should be the base of operation for bringing people together.
11. In the process of determining goals and objectives, opinion must be balanced with fact.
12. The interaction process must begin with concerns which have high priority for the people involved.

13. The school board should commit the resources necessary to see the goal-setting process through to a satisfying conclusion; board members should be encouraged to participate in the interaction process, not as board members, but as private citizens.
14. Teachers and administrators should honor their responsibility to the community by taking an active part in the goal-setting process.
15. A variety of meetings should be held as part of the goal-setting process; mixed groups assist consensus building.
16. Inasmuch as the learning process is recognized as dynamic and individualistic, any objectives of education that are established should not be so specific or restrictive as to preprogram the learning process for any student.
17. To ensure that the goals and objectives of public education continue to be relevant, a recycling process should be designed.
18. The goal-setting and planning process should result in observable action.

Anyone familiar with the operations of a public school district will recognize how idealized these principles are. On the other hand, collective bargaining agreements with teachers and other groups have taken away or ignored much of what used to be a community affair which involved the public, the PTA, and others in the running of the schools. Efforts to reestablish and/or broaden the school's accountability to the community through increased participation, lay involvement, and semiautonomy promise to be difficult, especially where strongly profiled positions of divergent self-interest exist. In such cases, only state legislation mandating such an involvement process is likely to establish its use extensively. Many state legislatures already have mandated community involvement (Hawthorne 1973).

Appealing to an Alternative Form of Education.

Another expression of accountability in education is based on a sort of "consumer's choice" logic. Through the use of "educational vouchers," a parent can pay for the schooling of his choice, provided there is a selection of alternative

schools available and the parent is sufficiently dissatisfied with the educational fare at the local public school. Presumably, through competing forms of publicly financed educational systems (public and semiprivate), the parent can hold schools accountable by exercising alternative choices. While some individuals view the voucher plan as a form of accountability (Carr and Hayward 1970), it falls outside the scope of the emerging accountability patterns defined earlier. Christopher Jencks (1970) and others developed arguments for the educational voucher which were sufficiently strong to warrant its current testing at Alum Rock, California, and proposed trial in New Hampshire under the auspices of the National Institute of Education.

While alternative forms of education through vouchers have special appeals of their own--particularly in higher education (Levin 1973)--and are seen by some as expanding the accountability of educational institutions by increasing the ability of persons to "vote with their feet" for the kinds of institutions they choose to attend, it is not apparent what particular qualities alternative forms of education possess that increase accountability as the concept is used in this monograph.

In Sum.

Several avenues to greater accountability in education seem available, taken singly or in concert with others. There are at least four broad expressions for increasing accountability, with a fifth approach also being considered. How successful any and/or all of these applications might be will have to be determined in measures of degree.

CHAPTER V

AN OVERVIEW OF ACCOUNTABILITY MODELS

Putting together all the elements discussed in order to render a better account of the differences made, what picture emerges? A picture of the full-blown pattern emerges in a U. S. Office of Education memorandum from Technical Assistance Coordinator, Stanley Kruger.

This document serves as a prototype embodiment of the elements in a fully developed accountability model. According to this April 3, 1970, memo, the Division of Plans and Supplementary Centers (DPSC) distributed it "in an effort to promote the implementation of accountability in DPSC programs to a greater extent than has been accomplished heretofore." Twelve factors were "identified as being critical to the process":

1. *Community involvement:* utilizing members of concerned community groups in appropriate phases of program activity in order to facilitate program access to community resources; community understanding of the program's objectives, procedures, and accomplishments, and the discharge of program responsibilities to relevant community client, service, and support groups.
2. *Technical assistance:* providing adequate resources in program planning, implementation, operation, and evaluation by drawing upon community, business, industrial, labor, educational, scientific, artistic, social/welfare, and governmental agencies for expertise and services necessary for effective operations.
3. *Needs assessment:* identifying target group and situational factors essential to the planning of a relevant program of action.
4. *Change strategies:* developing effective strategies for systematic change in the

educational enterprise and incorporating the strategies into program operations.

5. *Management systems:* adopting the systems approach--through such techniques as MBO, PPBS, PERT, and CPM--to educational program management at the local, state, and federal levels.
6. *Performance objectives:* specifying program objectives in a comprehensive, precise manner that indicates measures and means for assessing the degree of attainment of predetermined standards.
7. *Performance budgeting:* allocating fiscal resources in accordance with program objectives to be realized, rather than by objects or functions to be supported.
8. *Performance contracting:* arranging for technical assistance in program operations through internal or external contracts that condition compensation upon the accomplishment of specified performance objectives.
9. *Staff development:* determining the nature and extent of staff development needed for the successful implementation of the accountability concept at the local, state, and federal levels, and the design and conduct of indicated development activities.
10. *Comprehensive evaluation:* establishing systems of performance measurement based on the continuous monitoring of the program's operational and management processes as well as assessment of its educational and other resultant products.
11. *Cost-effectiveness:* analyzing unit results obtained in relation to unit resources consumed under alternative approaches to program operation as a determinant in continued program planning.
12. *Program auditing:* setting up a performance monitoring system based on external reviews conducted by qualified outside technical assistance, designed to verify the results

of the evaluation of an educational program and to assess the appropriateness of program operation and management.

In part, taking cues from the federal efforts, by 1973 Hawthorne reports 23 states had passed some form of accountability legislation with a majority of these requiring a state "proof-of-results" testing or evaluation program. Seven states request plan-program-budget-system forms of educational accounting, and eight have statutes for evaluating the professional staff. There is considerable diversity between states in terms of the language and content of sometimes similar pieces of legislation; some of the legislation is "hard" (i.e., explicitly prescriptive) and some "soft" (loosely defined). A compilation of state legislation and its interpretation is being maintained by the State Education Accountability Repository (SEAR) under the auspices of the State Department of Public Instruction in Madison, Wisconsin.

Typical of efforts at the state level is Michigan's accountability model developed by the State Education Department under the leadership of Superintendent John Porten. It is described, in part, as follows:

The model highlights the need for common goals of education, development of performance objectives rather than textbook completion, assessing needs, analyzing the ways in which teachers teach, and providing outside educational audits to determine if changes have indeed taken place, in addition to providing guaranteed in-service professional development.

This model is a process, not a curriculum imposition. Along with being continuous and circular, the model is envisioned as enhancing the role of the teacher in the educational process of preparing our children and youth for adulthood.

In a sense, use of the educational accountability model is analagous to program budgeting in the business world. It involves planning, acting, and evaluating; it is a tool to be employed, or a road map to help lead the educator or citizen get where he wants to go (1972).

The Michigan model contains six general categories, "thrusts," or steps toward increased accountability:

Step 1: Common Goals. The State Board of Education has articulated certain goals for children. These are spelled out in general terms in the *Common Goals of Michigan' Education*. Each local district is asked to develop its own modifications of these goals.

Step 2: Performance Objectives. There are, by consensus and by definition, certain things it is assumed children ought to know at various stages in their development. This information must now be translated into performance measures. While much work remains to be done, the performance objectives fall naturally into skill areas and attitude-aspiration areas which are, psychologically speaking, in the cognitive domain, the psychomotor domain, and/or the affective domain.

Step 3: Needs Assessment. Having identified the goals for children, and having articulated the performance objectives for schools, it is necessary to assess the existing relationship between goals and objectives. This analytical chore must utilize all the knowledge at hand: research findings, testing results, resource distribution, personnel availability, and a host of other factors. The objective is to give local school officials some notion of the variance between desirability of performance objectives and what the child or children can do (needs assessment).

Step 4: Delivery Systems Analysis. Based on needs assessment, plans must be made to change the delivery systems to reverse what has often been termed as the "push-out" or "leave behind" problem. Among the many things which may be used are performance contracting, compensatory education, promising practices from experimental and demonstration schools, year-round schooling, intensified preschool education, improvement of nutrition through school meals, in-service training of teachers, and many others.

Step 5: Evaluation and Testing. If a change takes place in the delivery system, that change needs to be tested and evaluated. If valid, across-the-board in-service professional development programs should be fostered.

Step 6: Recommendations for Improvement. When a district or school has gone through these steps, it should feel obligated to share the results. Recommendations to the local district, and to the [Michigan] State Board of Education complete what is essentially a circular pattern of service--goals are served and/or modified on the basis of continuing attention to the success or lack of success in the educational delivery system, and the process starts over again.

In this manner Michigan's Department of Education hopes to determine whether or not their schools make a difference and to act where the difference made is not favorable. But, as the Department observes: "To some, consideration of an accountability model or new elements in education has appeared to represent a threat or a challenge to historically developed educational approaches and a judgment as to the efficacy of such approaches at this point in time. No threat is intended..." Plainly, however, the Michigan Education Association perceives it as a threat, circulating literature and cartoons depicting State Superintendent Porter on a steamroller marked "Accountability," flattening teachers and students.

In addition to resistance from Michigan teacher groups, the Michigan Accountability Model has received criticism from other quarters. In their generally negative study of its implementation and operation, Ernest House, Wendell Rivers, and Daniel Stufflebeam (1974) charge that:

- the system's common goals have not been sufficiently clarified
- the objectives were developed by relatively few people and thus do not represent a broad consensus
- the Department of Education has been unable to give much help in developing evaluation systems within local schools
- the assessment efforts are: (1) too narrow in scope (testing mainly reading and arithmetic at two grade levels); (2) not always appropriately valid for what is taught locally; (3) putting assessment results to questionable use; and (4) not being supported widely

At the same time, House, Rivers, and Stufflebeam concede that the model has:

- stimulated public discussion of educational goals and given direction to state efforts
- involved educators throughout the state in educational objectives development
- resulted in pilot forms of objectives-referenced tests which some teachers find useful
- worked generally to create an aura of innovation and change.

The House-Rivers-Stufflebeam team favors a slower rate of the model's development; matrix sampling (rather than state testing all students); making state assessment voluntary for local districts (thus making it a negotiable item for teacher groups); and channeling more state help into developing local school-based (rather than State Department of Education-based) evaluation systems. They eschew "the absurd practice of tying [state] money to gains in achievement scores" (1974, p. 669).

In turn (and without prolonging this discussion), the Michigan Department of Education has defended its model and raised some legitimate questions and issues about the House-Rivers-Stufflebeam critique (See Kearney, Donovan and Fisher, 1974). Continued debate can be expected.

Applied to local levels, the creation of accountability models carries a range of advice for practitioners attempting to implement such models. The literature holds a variety of caveats expressed as "imperatives." For example, Lopez (1970) warns that accountability programs must (1) pay attention to communicating with all parties; (2) have an organizational philosophy or plan of action that has the allegiance of everyone; (3) be specific about its purpose; (4) improve the performance of all persons involved; (5) be sensitive to human needs; and (6) have all persons who are touched by the program participate in its development from start through finish.

Mazur (1971) joins Lopez in pointing out potential accountability model pitfalls. He maintains one should avoid (1) making unrealistic administrative demands; (2) forcing accountability programs on unwilling and uncomprehending staff; (3) perceiving accountability as an end rather than a means; (4) moving forward with a shallow understanding of accountability policy and procedure; (5) having too great expectations from minimal procedures and small resources; and (6) placing too much faith in the reliability of accountability measures (the criterion problem).

Mazur's own positive imperatives are brief: one must have a trained staff and the opportunity to employ accountability procedures and must possess the capability for generating information appropriate to planning and development.

Cunningham (1971), writing about decentralization and community control, offers the following imperatives for program design: (1) responsiveness to the participation impulse in people; (2) movement toward demonstrably improved education; (3) recognition of the "equality of opportunity" mandate; (4) accommodation of lay-professional antagonism; (5) financial feasibility; and (6) politically attainable goals.

Without attempting to exhaust imperative listings, it might not be an exaggeration to conclude there are nearly as many listings as authors; one may pick from among the many edited works of Browder (1971), Educational Testing Service (1971), Roberson (1971), Lessinger and Tyler (1971), Sciara and Jantz (1972), and others. At the same time, the listings tend to be similar in many respects. Unfortunately, it is rather unfair to merely summarize imperatives like a grocery list and forego the closely written explanations with which these model designers buttress their points. The purpose here, however, is to alert the reader to the fact that there are multiple and differing caveat emptor signs dotting the landscape, (not to lead him by the hand to each one).

Among the more ambitious works in creating performance-based accountability models for local application is Browder, Atkins and Kaya's *Developing an Educationally Accountable Program* (1973). This publication too offers imperatives. It states the program must: (1) have knowledgeable designers; (2) lead to improved education; (3) recognize and accommodate diverse forms of participation; (4) train personnel before and during implementation; (5) fulfill the conditions of their accountability concept; and (6) be judged politically attainable.

Using the U. S. Office of Education's 12 elements cited earlier and their own imperatives; Browder, Atkins, and Kaya weave these items into a four-phase model with critical and optional features. Skeletally expressed, the model follows a process for developing the authors' interpretation of an educationally accountable program for a local school district:

Phase 1 Preliminary Planning

- Assess needs (critical)
- Develop a preliminary change strategy (critical)

- Consider the use of technical assistance and management systems (optional)

- Make a decision to move, or not to move, to Phase 2

Phase 2: Formal Planning

- Involve the community and staff (critical)

- Repeat the needs assessment (optional)

- Repeat the change strategy development (optional)

- Develop goal consensus and performance objectives (critical).

- Consider use of a plan-program-budget-system (optional)

- Develop criteria for program evaluation (critical)

- Make a decision to move, or not to move, to Phase 3

Phase 3: Program Implementation

- Develop the program's staff before and during implementation (critical)

- Implement program procedures (critical)

- Consider

- Use of external and/or internal performance contracting (optional)

- Use of management-by-objectives, project management, and network monitoring procedures (optional)

- Reach predetermined completion points of program efforts

Phase 4: Rendering the Account

- Evaluate the program (critical)

- Report the results (critical)
- Use an educational program auditor (optional)
- Make a cost effectiveness analysis (optional)
- Determine the level of confidence issue (critical)
- Certify the nature of the results (critical)

Again, like the imperatives, models abound also; Fairley (1973) presents a model for a federal accountability system; three teams of prestigious researchers present models for the Ohio Department of Education (1973); Rand and Stover (1971) present "a field-proven model" for Temple City, California; Pilot (1972) offers a "system accountability" for Sarasota, Florida; Niedermeyer and Klein (1972) devise a model for "Staff Performance Improvement and Appraisal" in Newport-Mesa, California; Berry (1974) develops "An Alternative Accountability System" in Alta Mesa, California; and so on. What may one conclude? Performance-based accountability models in public education come in all sizes, shapes, and degrees of sophistication.

CHAPTER VI

SOME CONTINUING ISSUES AND CONCLUDING REMARKS

What problems and issues continue to arise? As mentioned earlier, the history of accountability in its sharpened form is still too brief to supply the kind of empirical data base necessary to form a judgment of its value to education. It is simply too early in its development to be certain.

On the other hand, what other rationally based system exists for seeking measurable performance from those entrusted to produce it--a system that holds more promise for determining differences made on publicly educated learners? No other system appears unless one takes a position that the process of public education should not seek "to make a difference" by maximizing rationality, operational efficiency, performance measurement, and clarity of responsibility. And there are those who believe that public education should not seek "to make a difference" (Leight 1973) and should have learned something from its earlier flirtation with rationalized "efficiency" (Callahan 1962).

It is more nearly an issue of degree. No serious observer advocates the total absence of accountability, and very few persons appear willing to push it to its theoretical limits. A key issue in the current movement is: to what degree can (and should) we really hold people and programs accountable? Typically, one is asked to accept a pragmatic answer: to a degree that is more than generally practiced but is far less than theoretically possible. One reason for this answer is that the machinery for enacting accountability measures is still being perfected, and, while it has gotten beyond the threshold of primitive development, its usage has not reached a level of confidence akin to Caesar's wife. A second reason is found in human nature. A few people may regard themselves accountable to no one or for nothing; most will acknowledge a generalized accountability, and very few seek extensive accountability. To date, education has not called for the kind of accountable precision necessary for the launching of rockets in a space venture. This degree would be too cumbersome, unwieldy, and impractical for today. By the year 2001, who knows?

In the meantime, the issue for public education becomes one of establishing a standard of desirability concerning "how much" accountability, what kind, and under what conditions. Resolving this issue, tangled as it is in conflicting values and points of view as well as opposing strategies, will probably depend as heavily on political, social, and economic considerations as those factors purely educational in nature. The phrase, "negotiable accountability," captures the spirit of this issue. And, as one discovers in practice, everything in public education, one way or another, becomes negotiable between stewards and reviewers. A major hope of accountability-linked systems is that they will yield more valid and reliable data on the inputs, the process, and the outcomes of educational organizations. This information, in turn, supplies the basis for negotiating responsibility, more rational decision making, and more informed levels-of-confidence judgments. In its absence, one party's claim is as good as another's.

Probably the greatest strength of the accountability concept in public education--a strength bound to be felt in the negotiation process between stewards and reviewers--lies in the rationale of its supporting assumptions. These assumptions hold that:

- The schools exist primarily to produce publicly endorsed changes in the learning behavior of their major client, the student.
- Learning behaviors, expressed as outcomes, can be achieved in multiple ways, some more effective than others.
- Because the resources (time, money, staff, etc.) available in any school district are customarily less than the demands made upon them, it is incumbent upon the administrative staff to seek and recommend an optimum balance between the available resources and the most effective means of expending them in attaining publicly endorsed goals and objectives.
- Without the presence of some form of accountability process, it is difficult or impossible to gauge learner progress well--either by individual or group--or instructional effectiveness for the purpose of decision making.

--Programs carrying the conditions of the accountability process lend themselves to better, more informed kinds of decision making for seeking the optimum balance between resource expenditures and learning achievement.

--Given sufficient time and operation, programs identified by the accountability process as "ineffective" (i.e., failing to pass the level-of-confidence review of results) should be either modified, eliminated, or replaced by more effective programs.

--The accountability process linked to performance measurement is a vehicle that holds promise for improving learning outcomes, decision making, and rational adjustments to change pressures in an interdependent, technological society.

The validity of any of these assumptions is open to question. Accordingly, these assumptions can become issues in themselves.

It is, however, between these assumptions and their translation into practice that the more commonly heard issues remain: Who is accountable to whom for what? Is it possible to develop a set of effectiveness indicators that really indicate effectiveness? Is the present state-of-the-art of evaluating learning outcomes able to yield useful and valid measurements for accountability purposes? These issues continue to fill the literature.

In conclusion it would appear that, with the passage of time and with continually improving educational technological abilities, even those individuals who currently claim it is not possible to obtain the proposed standards of accountability reflected in accountability models like Michigan's (accepted by many today as being operable) will come to accept the idea that education possesses the capability. It can be done.

The issue of willingness to do so is another matter. Powerful unions have, for years and for various reasons, withstood pressures to make changes that would improve practice in their fields. Other groups too, fearing their interests threatened or simply not trusting change, do not respond with enthusiasm. Even society itself, in areas like ecology, shows a slowness to respond to needed and technologically possible changes. One of the challenges of the current

situation is to demonstrate the importance of accountability's purpose over its many techniques. The willingness of people to listen, believe, and act on this information remains to be seen. As Frank Schmidtlein observes:

"...a focus on the willful behavior of people, which is the usual object of auditing and attempts to strengthen accountability, is particularly ineffective since people's values and ideologies are highly resistant to change" (1974, p. 11).

Yet public education today is under enormous pressures to change. It will change. Exactly how and when, however, remain uncertain. In meantime, who's afraid of educational accountability.

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